# **UTAH DEPARTMENT OF TRANSPORTATION**

# CONSTRUCTION MANUAL OF INSTRUCTION

February 2008

# UTAH DEPARTMENT OF TRANSPORTATION

# **Construction Manual of Instruction**

# Introduction

In addition to other requirements construction contracts and specifications set forth requirements of the Contractor, including method of measurement and basis of payment. Alternatively, the Construction Manual of Instruction defines and establishes the responsibilities of the Department's Resident Engineer and field personnel regarding the proper administration of contract provisions. The Resident Engineer is responsible for controlling inspection, proper documentation, and assuring the project is constructed in accordance with the plans, specifications, and special provisions.

It is imperative that each contract is read and understood by those involved in its administration. The Resident Engineer and assigned field personnel's basic responsibility are to verify the Contractor's compliance with the contract requirements. The following information is not to be interpreted as replacing, modifying, or superseding any provisions of the specifications, plans, or contract.

Included in this manual are references to specifications, policies and procedures, and parts of the Code of Federal Regulations (CFR). Additional information may be found in the FHWA Contract Administration Core Curriculum Participant's Manual and Reference Guide.

To access CFR - Title 23 Highways (23 CFR) go to:

http://www.access.gpo.gov/cgi-bin/cfrassemble.cgi?title=200123

To access CFR – Title 49 Transportation (49 CFR) go to:

http://www.access.gpo.gov/cgi-bin/cfrassemble.cgi?title=200449

To access United States Code – Title 23 Highways (23 USC) go to:

http://www.access.gpo.gov/uscode/title23/title23.html

For access to FHWA Contract Administration Core Curriculum Participant's Manual and Reference Guide go to:

http://www.fhwa.dot.gov/programadmin/contracts/coretoc.htm

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# **Administration and Organization**

(Reference Policies and Procedures 05C-30)

# Department Organization

The Construction Division is charged with the responsibility for administration of contracts. It assumes responsibility at the time the contract is advertised in accordance with procedures established by the Department. Its responsibility ceases when the Department has accepted the project and final payment has been issued to the Contractor.

Construction engineering functions are under the direction of the Director for Construction and Materials. The Director for Construction & Materials coordinates and directs construction engineering activities, materials certification and testing programs for the Department, and acts as an advisor for the Department on matters of engineering policy.

The Department includes four Regions, each having a Region Director functioning as the operational representative of the Deputy Director. The Region Director is responsible for all construction and related activities of the Department within their Region. Each Region is divided into districts.

A District Engineer is assigned to contract administration and is directly responsible to the Region Director. Among other duties, the District Engineer is responsible for approving all specification changes and the acceptance of completed projects. The District Engineer functions as the Federal Highway Administration (FHWA) representative for Stewardship projects administered in accordance with the FHWA/UDOT Stewardship and Oversight Agreement.

Project Managers work under the general direction of the Region Director. Each project is assigned to a Project Manager who has overall responsibility for the scope, schedule, budget, and quality of the project.

The Resident Engineer is the Department's representative on the project and operates under the general supervision of the District Engineer. The Resident Engineer coordinates activities with the Project Manager on all matters affecting the project scope, schedule, and budget.

# Federal Highway Administration (FHWA)

(Reference 23 CFR 640)

On a project for which the Federal Government makes all or part of the funding available, the terms of Federal participation are established in an agreement between the Department and FHWA, known as the FHWA/UDOT Stewardship and Oversight Agreement. This agreement provides that the work is to be done in accordance with predetermined standards included in the plans and specifications, standard drawings, and special provisions. Before Federal-aid funds are disbursed to the Department, FHWA conducts reviews to make certain the projects have been constructed in accordance with the agreement.

Administration of construction is a function of the Department and its engineers and inspectors. However, engineers from the FHWA will make inspections of projects at times selected by them.

The relationship between the FHWA and the Department does not directly involve the Contractor. FHWA representatives inspect the project for the purpose of reviewing the Department's procedures requiring the project to be constructed in accordance with commitments contained in the Department's agreement with FHWA. The FHWA has neither responsibility nor authority to deal directly with the Contractor.

# Project Organization

Each contract is under the direct supervision of a Resident Engineer assigned as the Department's representative for the project before award of the contract. This assignment is made through an assignment order issued from the Director of Construction and Materials.

As the Department's representative, the Resident Engineer will have frequent personal contacts with the Contractor, property owners, municipal and utility representatives, and the traveling public. It is important the conduct of these associations be of a character that reflects credit on the Resident Engineer and the Department.

# Local Government/Consultant Managed Projects

(Reference 23 CFR 1.11, 23 CFR 635.105 and Policies and Procedures 07-94)

Consistent with the definition of "Engineer" in accordance with Section 00570, a Consultant Engineer responsible for construction engineering and contract administration is considered an extension of the Department and has the same responsibility and authority as a Resident Engineer. Consequently, the term "Consultant Engineer", or "Consultant Project Engineer", is interchangeable with the term "Resident Engineer" as applicable and used throughout this manual.

On Local Government projects using Federal aid funds, a UDOT District Engineer or Resident Engineer must be in responsible charge in accordance with the definition found in the <a href="FHWA Contract Administration Core Curriculum Participant's Manual and Reference Guide (Reference "Project Supervision and Staffing" under "State Procedures.") The UDOT Region Director will assign this Engineer.

# Intra-Department Relations

Understanding the functions and problems of other divisions and the manner in which they fit into the overall organization improves teamwork within the Department. Each employee has responsibility to promote good relations with fellow employees. A principal factor in promoting good relations is to keep your supervisor fully informed about all pertinent events that happen on work for which you are responsible. This principal applies equally at all levels of authority.

Each employee is expected to carry out the instructions of the supervisor. Each supervisor's conduct should earn the support and cooperation of all assigned employees. Each employee must know his/her responsibility and must have authority to execute it. The Resident Engineer is expected to brief assigned personnel on plans and schedule for the work immediately ahead.

# **Bidding Requirements and Conditions**

(Reference Sections 00120 & 00515)

# General Requirements

(Reference Policies and Procedures 08B-1, 08B-12, 08B-27)

The specifications establish the conditions under which bids are accepted by the Department and the Contractor's responsibility for knowledge of job conditions and the plans and specifications. Even though having little or no involvement in bidding procedures, the Resident Engineer should be aware of the contents of this section.

# Pre-bid Review/Meetings

The Resident Engineer will be available to answer bidder's questions and provide a site review upon request. Pre-bid meetings are held as specified in the contract (Department special provision 00250S) to communicate unique information to all prospective bidders.

Specifications cite the Department is bound only by written statements, representations, or descriptions of conditions and work and that no oral explanations or instructions are binding. However, the Resident Engineer and field personnel should be aware that any statements regarding conditions, work difficulty, or any other comments not included in the plans and specifications could significantly influence the bid preparation.

# **Award and Execution of Contract**

(Reference Sections 00515 & 00555)

#### Notice of Award

The Notice of Award is official announcement to the lowest responsible bidding contractor that the contract has been awarded. This document informs the Contractor of the Resident Engineer assigned to represent the Department for the duration of the contract.

#### Notice to Proceed

The Notice to Proceed is official announcement giving authorization to the Contractor to proceed with the work. This indicates that all bonds, insurance certificates, and contracts have been signed. The Resident Engineer will <u>not</u> allow work to start before the Department issues the Notice to Proceed.

#### **Prosecution and Progress**

(Reference Section 00555)

# General Requirements

Specifications establish the Contractor's responsibility to furnish adequate resources for meeting specified project schedules and quality of construction. The Resident Engineer will direct unsatisfactory progress to the Contractor's attention in writing. If the Contractor does not act in keeping with the intent of this section the matter is to be directed immediately to the attention of the District Engineer.

# Preconstruction/Partnering Conference

As soon as possible after the project has been awarded, the Resident Engineer will arrange and conduct a conference with the Contractor and interested parties for the purpose of reviewing construction details, proposed schedules, communication

protocol, and to identify personnel and their responsibilities and make initial coordination for beginning of work, etc.

Before the meeting, the Resident Engineer should have studied the plans and special provisions and made a field inspection of the project in order to be well informed as to the contract requirements and existing conditions.

Refer to Section 00725 and the UDOT & Utah Association of General Contractors Partnering Field Guide for information concerning partnering.

# Subletting of Contract

(Reference 23 CFR 635.116 and FHWA 1273)

When portions of the contract are sublet, the Contractor continues to be the legally responsible party for the administration of the contract. All instructions, orders, changes, or other contract matters pertaining to the subcontractor's work should be directed to the Contractor. The Resident Engineer and field personnel must be careful to maintain the proper channel of communication and maintain the Contractor's role under the contract.

Requests by the Contractor to sublet work are submitted to the Resident Engineer on Form C115 (Request to Sublet Work). A separate form is required for each subcontractor. Requests to sublet work must be reviewed and approved before the subcontractor performs any work on the project. Before approval by the Resident Engineer, requests to sublet work must be reviewed to verify:

- 1) The maximum allowable percent sublet is not exceeded.
- Contractor's compliance with the original Disadvantaged Business Enterprise (DBE) commitment (Federal-aid projects)
   (Reference Policies and Procedures 08B-110 & Contract - Bid Conditions)

On Federal-aid projects, form C116 (Subcontract Agreement Certification for Federal-aid Projects) is required to be submitted with form C115.

In addition to reviewing and approving requests to sublet work, the Resident Engineer will randomly select 1 out of 10 subcontractors, with a minimum of 1 per project, and request a copy of the Contractor's subcontract agreement to verify compliance with the requirements cited in Section 00555. For Federal-aid projects, the Resident Engineer will confirm that the required Federal-Aid Provisions (Reference 23 CFR 633.102e and FHWA 1273) are included in the agreement. Verification of this process will be made in accordance with UDOT Policy and Procedure 08B-28, Review of Construction Practices and Procedures.

# Limitation of Operations

Limitations of operations identify the constraints under which the Contractor must perform construction activities in the course of the project. These limitations are unique to each project and are described under special provision 00555M.

#### Contract Time

(Reference Policies and Procedures 08A-9, 23 CFR 635.121)

Unless otherwise specified in the contract, time charges commence 10 days following the Notice to Proceed. The Resident Engineer has authority to suspend

time charges on working day or calendar day contracts when it is in the interest of the Department. The Resident Engineer will <u>not</u> suspend time charges or waive the commencement of time charges unless it is determined to be in the interest of the Department and coordinated with the Project Manager and District Engineer.

The Resident Engineer will keep the Project Manager and District Engineer informed with respect to the justification and duration of the suspension of contract time.

# **Definitions**

(Reference Section 00570)

Section 00570 includes abbreviations and definitions for commonly used contract terms.

# Scope of Work

(Reference Section 00725)

This section establishes conditions and procedures under which alterations may be made to the project through contract modification (Change Order). This section also cites requirements for the use of on-site materials, Contractor's responsibility for work, railway/highway provisions (Reference Policies and Procedures 08A6-1, 08A6-3, 08B-29 and 23 CFR 645, 23 CFR 646), and Value Engineering (VE) proposals (Reference Policies and Procedures 08A4-1 and 23 CFR 627). When differing site conditions, extra work, work beyond the scope of the contract, or requests or claims for additional compensation or time become known or anticipated, notify the District Engineer and Project Manager.

# **Change Orders**

(Reference Policy and Procedure 08B-10 and 23 CFR 635.120)

Change orders modify the contract and are required for, but not limited to, the following conditions: Plan or specification change or addition, differing site condition or significant change in the character of work, change in DBE commitment, extension of contract time, extra work required that cannot be tied to an original bid item, and acceptance of a value engineering proposal. Refer to the <a href="FHWA Contract">FHWA Contract</a> Administration Core Curriculum Participant's Manual and Reference Guide — "Change Orders (Extra Work and Time Extensions)" under "State Procedures."

Prepare change orders to be self-explanatory. Approving authorities are not as familiar with the aspects of the work as the Resident Engineer and must understand the intent, governing specifications, and cost analysis with a minimum of research. Completed attachments, cost analysis, authorization to proceed, and any other documentation applicable to the change order must be included when transmitted to approving authorities.

A change order, signed by the District Engineer is required before proceeding with any change or extra work considered to be a major change, except in emergency or unusual situations as provided in <u>23 CFR 635.120</u>.

A major change is a change that will significantly affect the cost of the project to the Federal Government or alter the termini, character, or scope of the work. The following types of changes or extra work are considered to be major changes requiring District Engineer approval or authorization to proceed before work begins:

- 1) Any change or extra work exceeding \$25,000
- 2) Significant changes in the character of work in accordance with Section 00725
- 3) Revisions in conflict with approved standards
- 4) Revisions to pavement structural section (Excluded are changes to nominal maximum size mixture for HMA, provided volumetric design gyrations remain unaffected)
- 5) Revisions in geometric design (alignment, and/or grade), which affect the design speed, or change the structural design of a major structure
- 6) Revisions involving addition, deletion, or relocation of bridges
- 7) Any change requiring revision in controlled access, including changes to median openings and changes requiring additional right-of-way (On uncontrolled access projects, changes in access locations will be considered minor as long as the change does not violate Administrative Rule R930-6, Accommodation of Utilities and the Control and Protection of State Highway Rights-of-Way)
- 8) Changes in any feature of design or construction which may be contrary to the intent of the environmental document (Changes must be coordinated with the Region environmental staff)
- 9) Any change related to the type or quality of materials to be furnished and incorporated into the finished project on a major item

Department policy, procedure, and responsibility for processing and approving construction contract change orders is described in Policy and Procedure 08B-10.

# Force Account

(Reference 23 CFR 635.120)

Force account will <u>only</u> be used when necessary, such as when the Contractor and Resident Engineer cannot agree on a price for the extra work, or when the extent of work is unknown or is of such character that a price cannot be determined to a reasonable degree of accuracy. The work is then performed on a force account basis.

All extra work to be performed by the Contractor on a force account basis must be approved before starting work. The approval request will include a description of the work to be performed, reason for extra work, and a cost estimate broken down to show costs for labor, materials, and equipment.

The Resident Engineer will keep accurate daily records of the work as it is done. The record will be submitted in duplicate to the Contractor's representative each day for signature. The Resident Engineer and Contractor will each receive one signed copy acknowledging the labor, materials, and equipment used each day.

At the conclusion of the work, force account charges will be summarized. The Contractor will furnish invoices, payrolls, etc., to support the charges.

# **Control of Work**

(Reference Section 00727)

# Engineer's Responsibilities

As the Department's representative, the Resident Engineer must make certain the project meets all contract requirements. The Resident Engineer should expect to obtain no more than what is specified or accept any less than the contract requirements. The Resident Engineer will in no way attempt to supervise work for the Contractor.

Personnel assigned to assist the Resident Engineer with testing, inspection, and documentation of the contracted work will have varying levels of training, experience, and certification. The Resident Engineer is responsible for the training and proper assignment of these personnel.

The Resident Engineer is responsible to make certain the contract work is performed in accordance with the contract provisions and that all materials incorporated in the work have been tested and accepted by the proper authority. The Resident Engineer is also responsible to make certain that progress and events are properly documented, all records and reports are filed, and the Departments interests are protected.

It is important the Resident Engineer keep the District Engineer and Project Manager informed of the progress of work, including any anticipated extra work, unusual problems or changed conditions, and potential for additional compensation due the Contractor.

#### **Duties and Authority of Inspectors**

Proper inspection requires good judgment, diplomacy, common sense, and a thorough knowledge of the work, plans, and specifications. It is the duty and authority of all inspectors to enforce the specifications. When differences in interpretation arise with the Contractor, the Resident Engineer will decide the matter.

The inspector is directly responsible to the Resident Engineer but may work under the direct supervision of a Field Engineer or other personnel assigned to specific construction operations. Inspector's duties include inspection, sampling and/or testing of materials, documenting and making necessary records or reports of operations, and other duties as directed by the Resident Engineer.

The inspector will always bear in mind that the management of the work is the Contractor's business. However, if any methods are employed which the inspector has reason to believe will impair the quality of the finished job, the Contractor will be advised accordingly and Resident Engineer notified immediately. The inspector is not to discuss the Contractor's means or methods of handling the work with competitors or others not directly involved with the project. The inspector will in no way attempt to supervise work for the Contractor or become obligated to the Contractor or their personnel.

The inspector is not authorized to revoke, alter, enlarge, relax, release any requirements of the plans or specifications, approve or accept any portion of the work, or issue any instructions contrary to the plans or specifications. If conditions

arise which seem to render it impractical to enforce the specifications, the inspector will contact the Resident Engineer immediately.

It is the duty of all inspectors to study the plans and specifications and be fully conversant with all the details of the work to be done. If anything is found which is not fully understood, the inspector will consult with the Resident Engineer.

#### Utilities

(Reference Policies and Procedures 08A6-2, 08B-29, and 23 CFR 645)

When utility facilities are affected by the construction or improvement of a highway, the utility companies are obligated to relocate, adjust, and/or protect such portions or sections of their installations as necessary to accommodate the construction. In some instances the Department shares in the cost of such work. In others it may be necessary for the Department to bear the total cost of such work.

When the cost of the necessary relocation and adjustment of a utility facility is totally or partially an obligation of the Department, a reimbursement agreement is negotiated between the Department and utility company for performing the relocation work. In some cases the utility relocation work is accomplished by including the necessary items of work in the general contract on a unit price basis.

The Resident Engineer must be familiar with the requirements included within reimbursement agreements established for purposes of constructing the project. The Resident Engineer should also make early contact with appropriate representatives from the utility companies involved and invite them to the project preconstruction conference in order to help facilitate and coordinate scheduling the work required.

# **Legal Relations and Responsibility to Public**

(Reference Section 00820)

#### Labor Relations

(Reference Policies and Procedures 08B-21 and FHWA 1273)

As part of the contract it is required that all labor regulations be followed. Requirements of the Contractor and Department regarding contract labor provisions are covered in the contract proposal and referenced regulations. A working knowledge of these regulations is expected of Department personnel to ensure compliance by the Contractor. The Department is responsible for enforcement of the contract labor provisions to the same extent as any other contract requirements.

# Required Notices and Posters (Federal-aid Projects)

Required notices and posters are listed on Form C131 (Equal Employment Opportunity Bulletin Board Project Review). The required notices and posters must be posted on the project in a conspicuous place so that interested persons may be readily aware of their contents. The Resident Engineer should perform a review within the first two weeks after beginning work on the project to verify the Contractor's compliance with these requirements. Reviews will then be conducted bi-monthly throughout the duration of the project. All reviews are to be documented on form C131.

# Labor and EEO Interviews (Federal-aid Projects)

Labor interviews will be performed and reported on form C136 (Labor & EEO Interview of Workers – Rev. 2/06). The Resident Engineer or appropriate designee should conduct interviews during the second and fourth week the Contractor and/or each subcontractor is on the project. As each new subcontractor begins working on the site, interview those employees.

#### Safety

(Reference Policies and Procedures 05D-2, 08B-30)

Refer the Manual on Uniform Traffic Control Devices (MUTCD) and <u>UDOT</u> Construction Safety and Health Manual.

#### Traffic Control

(Reference Section 01554)

(Reference Policies and Procedures 06C-61, 08-05)

Refer to contract requirements, the Contractor's Traffic Control Plan (TCP), and the MUTCD. Department personnel designated to monitor the Contractor's compliance with traffic control requirements will have a copy of the Contractor's Traffic Control Plan available at all times when on the project.

# Responsibility for Damage Claims

(Reference Policies and Procedures 08B-94)

The Contractor's responsibility for damage claims and insurance requirements are established in this article under Section 00820.

# **Measurement and Payment**

(Reference Sections 01280 & 01282)

(Reference 23 CFR 635.123)

# General Requirements

The Resident Engineer requires documents to substantiate acceptance of materials and work items for both quality and quantity. The basis of acceptance for quality, method of measurement, and basis of payment are established by specifications. Documentary evidence on which to base payment will be in accordance with policies established by the Department.

#### **Project Diaries**

The Resident Engineer is required to keep a daily diary on each project. The Resident Engineer's diary need not repeat information contained in Inspector's Daily Reports, but should contain general information about operations or communication between the Resident Engineer and the Contractor.

# Inspector's Daily Reports (IDR)

Each inspector assigned responsibility for major activities or operations will prepare a daily report (Form C111). This report should contain a day-by-day record of all significant events relating to the project. Since it may become important evidence in the decision of claims or establishment of responsibilities or liabilities, it is essential that the notes be complete. Daily reports should capture each major activity or operation in each major area, according the Contractor's baseline schedule, and those factors that delay or hinder the Contractor's progress. The person recording the information must sign the daily report. Principal items to be noted:

- 1. Weather
- 2. Any unusual or unexpected conditions or incidents
- 3. For major or critical activities:
  - a. Work hours
  - b. Manpower and major equipment working on activity, including arrival and departure of equipment and work crews identify subcontractors
  - c. Work performed or completed and location
  - d. Work or materials rejected, reasons, and explanation of how it affected work progress
  - e. Length and cause of any delay or shutdowns, things that impeded the work progress Did the work performed approximate the work scheduled?
- 4. Important discussions with the Contractor disputes or directions given
- 5. Labor and equipment spent on disputable items of work
- 6. Official visitors and inspections
- 7. Roadway conditions
- 8. Traffic Control Comments on compliance with TCP, contract requirements, and apparent effectiveness

# **Public Information Services**

(Reference Section 01315)

Requirements cited in Section 01315 are intended to apply specifically to those contracts that include an item for this work in the bid proposal. The type and extent of public information services will vary from project to project.

Public information services is intended to create an open two-way communication forum where the public is informed in advance of construction impacts in order to have an opportunity to minimize them and provide feedback on construction activities. The Resident Engineer is expected to work closely with the Region Public Involvement Coordinator in monitoring and facilitating the public information services effort.

#### **Public Relations**

UDOT personnel are in daily contact with a large number of citizens. As a public service organization, the Department is judged by its employees as well as by its work. Every employee should bear in mind they have a responsibility to build good will toward the Department.

In the event of contact with news media, Department personnel should answer questions or furnish information only on matters for which they have personal responsibility and are well informed. Questions concerning policy or programs should be referred to the Region Public Involvement Coordinator or Region Director. Do not offer personal comments about Department policies, supervisors, co-workers, Contractors, and politely turn aside all questions on those subjects. If additional direction is needed, contact the Region Public Involvement Coordinator.

# **Environmental Protection**

(Reference Section 01355)

It is the responsibility of all employees to be familiar with these requirements and be alert to possible violations. When violations are suspected, notify the Resident

Engineer and/or the District Engineer. The Resident Engineer has the responsibility to be familiar with all mitigation commitments in the environmental document.

# **Material Quality Requirements**

(Reference Section 01455)

(Reference Policies and Procedures 08B-31 and 23 CFR 637)

Specifications establish that only materials conforming to the requirements of the contract are to be used and that the Contractor is responsible for furnishing materials meeting the specified requirements. Materials, unless otherwise permitted by the specifications, cannot be incorporated in the work until tested and approved by the proper authority. The Department must base the acceptance of materials incorporated in the work on process inspection, material use, sampling, testing, and measurements in order to provide complete and positive verification of compliance. Without this verification of compliance the Department cannot fulfill its responsibilities under the contract for the commitment of public funds. The Resident Engineer will determine that a material has been properly accepted before permitting its use in the work and issuing payment to the Contractor.

23 CFR 637 cites requirements for Quality Assurance Procedures for Construction. In addition to other requirements each State Highway Agency (SHA) must develop a Quality Assurance Program, Independent Assurance Program, and laboratory and personnel qualification requirements. Materials acceptance requirements including point of acceptance, test methods, acceptance documentation and reports, sampling and testing frequencies, etc., are established in the <a href="UDOT Minimum Sampling and Testing Requirements">UDOT Minimum Sampling and Testing Requirements</a>. The Department's Quality Assurance Program, Independent Assurance Program, Laboratory Qualification Program, and Transportation Technician Qualification Program (TTQP) are described in the UDOT Materials Manual Part 8.

Refer to the specifications, <u>UDOT Minimum Sampling and Testing Requirements</u>, <u>UDOT Materials Manual Part 8</u>, and Policy and Procedure 08B-31.

Additional Materials information may be found at: http://www.dot.state.ut.us/index.php/m=c/tid=196

# **Project Accounting**

Information regarding Project Accounting can be found through use of the help menu within the Project Development Business System (PDBS) program. If additional guidance is required, contact the Region Contracts Specialist.

# **Project Acceptance and Contract Completion**

(Reference Sections 00555 & 00727)

Upon notification of substantial completion from the Contractor, the Resident Engineer performs an inspection and identifies all work necessary for physical completion. The Engineer notifies the Contractor in writing and stops contract time when the project is found to be substantially complete. The Contractor is required to meet the requirements for physical completion/final acceptance within 30 calendar days from the date of substantial completion.

Upon notification of physical completion from the Contractor, the Resident Engineer performs the final inspection. When the project is determined to be physically complete, the Resident Engineer notifies the Contractor in writing of the date of final acceptance and identifies any documents and Contractor obligations required to complete the contract. The Contractor is required to provide all necessary documentation to the Resident Engineer and complete all remaining obligations under the contract within 30 calendar days of the notification of final acceptance.

In accordance with the FHWA/UDOT Stewardship and Oversight Agreement, FHWA retains responsibility and authority for final acceptance on high profile projects. For all other projects, the District Engineer has responsibility and authority for final acceptance.

The Department has 90 calendar days following the date of contract completion to issue final payment to the Contractor.

The following documentation is to be completed, checked by the Resident Engineer, and submitted to the Region Contracts Specialist within 30 calendar days of the date of contract completion for review in order to process the final estimate and close the contract:

(Reference Construction Form C197)

#### Contractor's Documentation

C200 - Certificate of Receipt and Release Buy American Certification

# Resident Engineer's Documentation

Complete Project Files with Final Forms/Documentation List of Field Book Numbers to Archive As-Constructed Plans (Reference Policies and Procedures 08-3)

# **Project Files/Records**

Create and maintain project files as follows:

# Preconstruction/Correspondence

Notice of Award

Notice to Proceed

Preconstruction Conference agenda, minutes (if available) and attendance roster

Partnering Charter

Internal Correspondence (Incoming/Outgoing)

External Correspondence (Incoming/Outgoing)

Request For Information (RFI)

Public Information Services (Fliers, log book)

Miscellaneous

#### Change Orders

CO # 1

CO # 2, etc.

(Forms C100, C101, C102, C103, C104, and C107) R5 - Transfer of Material and Equipment

#### Partial Estimates

Partial Estimates (1-10, 11-20, etc.)

C109 - Fax Cover Sheet for Partial Estimates

C300 - Fuel Cost Adjustment Record

C302 - Bituminous Cost Adjustment Record

# **Project Reports**

C111 - Inspector's Daily Reports

C114 - Signature Sheet

Monthly Status of Contract Time

CPM Schedule

Weekly Schedule/Progress/Partnering meeting minutes

Project Inspection Reports/FHWA Inspections/C120 Reports

# Request to Sublet Work/Certified Payrolls

C115 & C116 - Requests to Sublet Work & Subcontract Agreement Certification for Federal-Aid Projects (File required for each Subcontractor)

Form 1444 - Request for Authorization of Additional Classification and Rate (US Dept. of Labor)

WH 347 - Certified Contractor and Subcontractor's payrolls (Required information may be in other format such as computerized payroll)

WH 348 - Statement of Compliance (For all payrolls)

Fringe Benefit Program (If applicable)

#### Materials

**Note:** All test reports and materials acceptance information is to be maintained in the Resident Engineer's office project file. Establish files numerically by bid item number – Include all certifications, materials test reports, approved shop drawings, etc. to support acceptance and payment. (A binder or expandable file using tabs separated by bid item number may also be used)

Suppliers List

C106 - Notice of Unacceptable Work or Material

Exceptions to the Plans, Specifications, or Materials Acceptance Program

Contractor's Binder Management Plan

Targets/Mix Designs

C150 - Culvert Inspection Form (If applicable)

Central/Region Material Lab Reports

Concrete Strength Reports

Scale/Meter Certifications

Weight Tickets

# Safety

Traffic Control Plan

Daily Traffic Control Inspection Reports

Traffic Control/Flagging Certifications

Safety Inspections

Contractor's Claim Procedure

OCIP (Owner Controlled Insurance Program)

# Utility/Railroad/Cooperative Agreements

Separate file for each entity in chronological order

# Environmental Clearances/Right of Way Contracts

**Environmental Clearances - Department** 

**Environmental Clearances - Contractor** 

Right-of-Way Contracts (R 193S)

# Civil Rights/Training

EEO & DBE Officers and Complaint Procedure

**DBE Commitment (PDBS)** 

**DBE** Analysis

**Training Commitment Letter** 

Trainee Registrations

C131 - EEO Bulletin Board Review

C133 - Harassment, Intimidation and Coercion Roster

C136 - Labor & EEO Interview of Workmen on Utah Highway Projects

C141 - DBE Commercially Useful Function (CUF) Project Site Review

PR1391 - Yearly EEO Report

Safety Meeting Rosters (Where EEO is discussed)

# Final Forms/Documentation

C119 - Contractor Performance Report

C190 - Project Acceptance Report

C193 - Utility Fiscal Review Report

C193A - Salvage Credit Report for Utilities and Railroads

C196 - Project Materials Certification & Attachment A

C197 - Final Estimate Check

C199 - Post Construction Conference Report

C200 - Certificate of Receipt & Release By Property Owner

#### Note:

Many of the above files are only applicable to Federal-aid projects, while other files are not necessarily applicable to all project types. When the Resident Engineer deems it appropriate for smaller projects, some or all files within sections may be combined. If additional guidance is required, contact the Region Contracts Specialist.

<u>Construction Forms</u> (Refer to <u>Minimum Sampling and Testing Requirements</u> for materials acceptance documentation requirements and forms.)

Construction forms can be found at: <a href="http://www.udot.utah.gov/index.php/m=c/tid=322">http://www.udot.utah.gov/index.php/m=c/tid=322</a>

FORM OR DOCUMENT	INITIATED BY	SUBMITTED THROUGH/TO	WHEN REQUIRED	PURPOSE	REFERENCE
CONTRACT AGREE	MENTS		<u> </u>		
C100 Construction Contract Change Order	RE/Project Office	Region Contracts Specialist/ Project Manager/ Contracts Estimates & Agreements Manager	Before the performance of extra work or change to the contract, and within two weeks following issuance of a C107 Authorization to Proceed	To establish the basis of payment for extra work and/or contract modification	23 CFR 635, Specifications 00570, 00725, & 01282, Policy 08B-10
C101 Attachment A	RE/Project Office	Region Contracts Specialist/ Project Manager/ Contracts Estimates & Agreements Manager	When Change Order is initiated	Cause or basis and justification for contract modification	23 CFR 635, Specifications 00570, 00725, & 01282
C102 Attachment B	RE/Project Office	Region Contracts Specialist/ Project Manager/ Contracts Estimates & Agreements Manager	When modifying an existing, or creating a new, contract specification	Identify change to contract specifications	23 CFR 635, Specifications 00570, 00725, & 01282
C103 Cost Analysis/Itemized Statement	RE/Project Office	Region Contracts Specialist/ Project Manager/ Contracts Estimates & Agreements Manager	For Force Account work  May be used for cost analysis for Agreed Unit Price	Cost justification and support	23 CFR 635, Specification 01282
C104 Weekly Force Account Cost Report	RE/Project Office	Project File/ Attachment to change order when applicable	When Contractor & RE cannot agree on basis of payment or agreed unit price, or when documenting disputed work	Documenting force account or disputed work	23 CFR 635, Specification 01282
C107 Record of Authorization to Proceed with Extra Work or Revision of Contract	RE/Project Office	District Engineer/Project Manager/ Contractor/ Contracts, Estimates & Agreements Manager	For emergency work, or when unusual conditions justify	Authorization for emergency work, or for authorizing extra work in advance of a fully executed change order for emergency work or when unusual conditions justify	23 CFR 635, Policy 08B-10

FORM OR DOCUMENT	INITIATED BY	SUBMITTED THROUGH/TO	WHEN REQUIRED	PURPOSE	REFERENCE
C115 Request to Sublet Work	Contractor (PDBS entry printed and signed by Contractor)	RE/Project Office/ Region Contracts Specialist/ Contracts Estimates & Agreements Manager	Before subcontractor can perform any work on the project	Documents percent of work performed by the Contractor  Resident Engineer must approve	Specification 00555
C116 Subcontract Agreement Certification for Federal-Aid Projects	Contractor (PDBS entry printed and signed by Contractor)	RE/Project Office/ Region Contracts Specialist/ Contracts Estimates & Agreements Manager	Before subcontractor can perform any work on the project	Certification that required Federal-aid provisions are included in subcontract agreement	FHWA 1273 VII, 4 23 CFR 633
R5 Transfer of Material & Equipment	Contractor	RE/Project Office/ Operations Office	At time of transfer	Transfer of materials or equipment from one division or low org to another	
RESIDENT ENGINEE			Lugar a		D # 055.51
C106 Notice of Unacceptable Work or Material	RE/Project Office	Contractor	Within 2 working days from determination of work or material out of specification	Notification of unacceptable work or material and action required of Contractor	Policy 08B-31
C109 Fax Cover Sheet for Partial Estimates	RE/Project Office	Estimates & Agreements Specialist	At time of processing partial estimates	Notification	
C111 Inspector's Daily Report	RE/Project Office	Project File	Daily during construction	Daily record of project activities	Construction MOI
C114 Signature Sheet	RE/Project Office	Project File/Region Contracts Specialist	Throughout the course of the project	List of personnel working on, and providing documentation for, the project	
C150-5B Culvert Inspection Form	RE	Project Office/ Project File	Upon placement of pipe culvert	Documentation for acceptance	Specification 02610
CIVIL RIGHTS, EEO,					
EEO & DBE Officer(s) – Notify Resident Engineer at Preconstruction Meeting	Contractor & Subcontractors	Project File & Post on Project Bulletin Board	At beginning of project	To designate and make known EEO/DBE Officer to administer EEO/DBE program in company	FHWA 1273 II.2
Training Commitment Letter (On Contractor's letterhead)	Contractor	RE/Project Office	Preconstruction meeting	Submission, for approval, the number and classification of trainees to be trained	Special Provisions, Specific EEO Responsibilities Sheet 3 of 4, Part 5 Training Special Provisions, paragraph 6

FORM OR DOCUMENT	INITIATED BY	SUBMITTED THROUGH/TO	WHEN REQUIRED	PURPOSE	REFERENCE
Apprenticeship BAT Certification / Trainee AGC Certification	Contractor	RE/Project Office	Before apprentice/ trainee begins work on project	Certification proving registration of apprentice/ trainees in program w/dates and ratios – renew every 90 days	FHWA 1273 IV, 4 a & FHWA LCM 507-3
Fringe Benefit Program (If applicable)	Contractor & Subcontractors	Labor Specialist, UDOT Civil Rights Office	Call Labor Specialist to see if already approved – if not approved, submit	Health and welfare, retirement and other fringe programs offered by Contractors – must be approved by Labor Specialist	29 CFR 3
WH-347 Payroll  (Information required on WH-347 may be in other format such as computerized payroll)	Contractor & Subcontractors	Subcontractors submit to Contractor – Contractor then submits all certified payrolls to RE/Project Office	Weekly (Must be originals)	Reports hours worked and wages paid for all employees working on the project — information required on WH-347 must be on payrolls if different format is used	29 CFR 3.4 (a) FHWA 1273 V 2(c)
WH-348 Statement of Compliance	Contractor & Subcontractors	RE/Project Office	Weekly – submitted with payroll (Must be original signatures)	Certification that payrolls are correct and information contained therein is true and accurate – wording must be exact	29 CFR 3.4 (a) FHWA 1273 V 2(c)
Form 1444 Request for Authorization of Additional Classification and Rate	Contractor & Subcontractors	Labor Specialist, UDOT Civil Rights Office	At beginning of project and/or when needed, thereafter	Requests for those classifications and rates not listed in wage determination – project specific – prime must sign even when sub makes request and signs	FHWA 1273 IV, 2(a – b)
Safety Meeting Rosters – (Where EEO is discussed)	Contractor & Subcontractors	RE/Project Office	At beginning of project and as needed thereafter for new employees	Roster of attendees at meetings where EEO topics were discussed – roster must show items discussed	Sheet 2 of 7, Part 4 (4) Special Provisions, Specific EEO Responsibilities

FORM OR DOCUMENT	INITIATED BY	SUBMITTED THROUGH/TO	WHEN REQUIRED	PURPOSE	REFERENCE
C131 EEO Bulletin Board Review	RE/Project Office	Region Contracts Specialist	At beginning of project and bi- monthly thereafter	Make certain all required posters and notices, including wage rates, complaint procedures and EEO officers are posted	Special Provisions, Specific EEO Responsibilities Sheet 2 of 4, Part 4 a(5) FHWA 1273 IV 1 a
C133 Harassment, Intimidation & Coercion Roster	Contractor & Subcontractors	RE/Project Office	At beginning of project and as needed thereafter for new employees	Roster of attendees at meetings where harassment, intimidation and coercion were discussed	Special Provisions, Specific EEO Responsibilities Sheet 2 of 4, Part 4 (4)
C136 Labor & EEO Interview of Workmen on Utah Highway Projects	RE/Project Office	Project File (Notify Region Contracts Specialist if having problems or complaints)	At beginning of project and once a month thereafter	To make certain employees are being paid and treated correctly as is required in the regulations	FHWA 1273 V (2) (g) 29 CFR Part 5.5(a)(3)(iii)
C141  DBE Commercially useful function (CUF) Project Site Review	RE/Project Office	Project File	Minimum once per project for each DBE working on project	Checking DBE compliance of performance and conduct requirements	Part XII Bid Conditions – Disadvantaged Business Enterprise (DBE), 49 CFR 26
CR257 Project Employment Data	Contractor & Subcontractors	EEO Compliance Specialist – UDOT Civil Rights Office	When requested for EEO & labor compliance review	To determine compliance with minority and female employment requirements	FHWA 1273 II 23 CFR 230
PR1391 Yearly EEO Report	Contractor & Subcontractors Over \$10K	RE/Project Office/ UDOT Civil Rights Office	For month of July  – once a year, due in Civil Rights Office by August 6	Reports employees of Contractors and subcontractors by race and classification for month of July	FHWA 1273 II, 9 b
FINAL FORMS/DOCUMENTATION					
DBE Item Analysis (Generated by PDBS)	RE/ Project Office	Region Contracts Specialist	Reviewed during the project for compliance – final report at contract completion	Determine and document that Contractor has met established goal	49 CFR 26
C119 Contractor Performance Report	RE/Project Office	Region Contracts Specialist	At contract completion	Contractor rating	
C127 Final Estimate Package Check Sheet	Region Contracts Specialist	Contracts, Estimates & Agreements Manager	When processing final estimate	Ensure complete documentation for closing of contract	

FORM OR	INITIATED BY	SUBMITTED	WHEN	PURPOSE	REFERENCE
DOCUMENT C128	PDBS/Region	THROUGH/TO Contracts,	REQUIRED When processing	Ensure complete	
Report on Assembly of Final Estimate	Contracts Specialist	Estimates & Agreements	final estimate	documentation for closing of	
(Generated by PDBS)		Manager		contract	
C190	RE/ Project office	Region Contracts Specialist	Substantial &	To document substantial &	Specification 00555 & 00727
Project Acceptance Report		·	physical completion	physical completion	
C193 Utility Fiscal Review	RE/Project Office	Region Contracts Specialist	Upon completion of utility work	Analysis of actual vs. estimated	23 CFR 645 49 CFR 18.36
Report				costs - used by FHWA,	
				Department Comptroller and Internal Audit	
C193A Salvage Credit	RE/Project Office	Region Contracts Specialist	Upon completion of utility work	Documents the disposition of any	23 CFR 645 49 CFR 18.36
Report for Utilities and Railroads	Office	Specialist	of dulity work	salvaged material	49 CFR 10.30
C196	RE/Project	District Engineer	At contract	Certification of	23 CFR 637
Project Materials Certification & Attachment A	Office		completion	project materials	23 CFR 640
C197 Final Estimate	RE/Project Office	Region Contracts Specialist	At time of submitting	Ensure complete documentation	
Check	Office	Specialist	project documentation to	documentation	
C199	RE/Project	Region Contracts	Region At completion of	Document any	Specification
Post Construction Conference Report	Office	Specialist	conference	outstanding disputes or issues	00727
				Lessons learned	
C200	Contractor/	RE/Project Office/	At physical	Document	
Certificate of Receipt & Release By	Land Owner	Region Contracts Specialist	completion	Contractor's agreement with	
Property Owner				landowner has been satisfied	
C201	RE/Project	District Engineer	At contract	Quality	
Customer Survey	Office/ Contractor		completion	assurance for construction	
	Communic.			administration practices	
FUEL & BITUMINOUS			1		
C300 Fuel Cost	RE/Project Office	Project File	When provision requirements	Document fuel cost adjustment	Specification 01282
Adjustment Record			become effective	•	
C302 Bituminous Cost	RE/Project Office	Project File	When provision requirements	Document bituminous cost	Specification 01282
Adjustment Record	Office		become effective	adjustment	01202
PROCESS REVIEW					
C120 Construction	Deputy Construction	RE, District	Bi-monthly	To accomplish	Policy 08B-28
Process Review	Engineer	Engineer, and Engineer for		intent of policy 08B-31 and	
Report		Construction		comply with policy 08B-28	
OCIP					

FORM OR DOCUMENT	INITIATED BY	SUBMITTED THROUGH/TO	WHEN REQUIRED	PURPOSE	REFERENCE
C109A Fax Cover Sheet for OCIP Forms	RE/Project Office	In accordance with form	At time of enrollment	Notification	
Enrollment Form (Attached to OCIP Special Provision & Construction Forms on web)	Contractor	RE/Project Office/ Willis of Utah	Submit with Request to Sublet Work (C115)	Required before entering jobsite	OCIP Manual & Special Provision 00810S
Insurance Certificate (Min. coverage per Section 14 – OCIP Special Provision)	Contractor	RE/Project Office/ Willis of Utah	Attachment to Enrollment form	Required before entering jobsite	

**List of Applicable Policies and Procedures** 

List of Applicat	ple Policies and Procedures
Policy Number	POLICY TITLE
Human Resource	ce Management (Section 05C)
05C-30	Rules of Conduct and Code of Ethics
Risk Manageme	ent (Section 05D)
05D-2	Personal Protective Equipment and Safety Clothing
Traffic & Safety	(Section 06C)
06C-61	Work Zone Speed Limits
Program Develo	ppment (Section 07)
07-94	Construction Engineering on Local Government Projects
Project Develop	ment (Section 08)
General	
08-3	Completing and Archiving As-Built Construction Plans
08-05	Work Zone Safety and Mobility
	on (Section 08A)
08A-9	Determination of Contract Time
	ering (Section 08A4)
08A4-1	Value Engineering
Utilities (Secti	
08A6-1	Railroad Participation and Maintenance Responsibilities for
00/10 1	Railway-Highway Projects
08A6-2	Accommodation of Utilities on Highway Rights of Way
08A6-3	Plans, Specifications & Estimates, & Railroad Agreements for
00/10-3	Railway-Highway Crossing Projects as Authorized by the
	1973 Federal-Aid Highway Act (Sections 203 and 230)
Construction	
08B-1	Prequalification of Contractors
08B-10	Change Orders
08B-12	Advertising and Awarding Construction Contracts
08B-21	Contractor's/Subcontractor's Labor Payrolls on Federal-Aid
00D-21	Projects
08B-23	Leasing Office Space For Construction Projects and Leasing
00D-23	of Stockpile Sites
08B-27	Bid Bond Forfeiture of Surety Bond, Cash, or Other Security
UOD-21	Instrument
08B-28	Review of Construction Practices and Procedures
08B-29	Accomplishment of and Payment for Utility Relocations
UOD-29	
	Required in Connection with Highway Work (Including Railroad Relocation)
00B 30	
08B-30	Construction Site Safety Inspection
08B-31	Projects Materials Certification
08B-91	Claims Review Board
08B-94	Claims Re-Examination Board
08B-110	Disadvantaged Business Enterprise (DBE) Program